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Franz von Weiss' maps of SE Europe (1821, 1829) issued in two crucial dates associated with the establishment of the Modern Greek state in early 19th century: A digital comparative approach.

Keywords: Franz von Weiss; Geostrategic maps; Pierre Lapie; South East Europe maps; Nineteenth century cartography; Cartographic heritage; Digital cartographic technologies

Summary

Franz von Weiss (1791-1858), an Austrian military cartographer, prepared in 1821 and 1829 two multi-sheet maps representing SE Europe (in particular the Balkan Peninsula), the “Geographische Karte des Osmanischen Reiches” in 17 sheets and the “Carte der Europäischen Turkey nebst einem Theile von Kleinasien” in 21 sheets, in almost the same scale, (appr. 1:575.000). The years these two maps are created correspond to two fundamentally crucial years in the process of birth of the Modern Greek state, since 1821 is the year of the beginning of the struggle for Greek Independence and 1829 refers to the establishment of the autonomous Greek state. These two von Weiss' maps are not widely known, but represent a strong point in the Greek cartographic heritage associated as well to the Austrian political and geostrategic interests in SE Europe during the first decades of the 19th c. The similarity of Weiss' cartography with that of Lapie's representations of the same area at almost the same period (1822, 1826) developed a research interest in analyzing these maps using digital processing techniques. In the paper the historic evidence of Franz von Weiss' maps in relation to early 19th cent. History of Greece is documented as well as the similarities of the Austrian maps with Lapie's coetaneous cartographic representations.

Introduction

According to standard bibliography¹, a map of the Austrian officer Franz von Weiss (1791-1858), entitled *Geographische Karte des Osmanischen Reiches*, was printed in Vienna in 1821, in seventeen map-sheets in scale 1:576.000². This map is rather unknown and difficult to find its traces in cartobibliography or in network searching machines, in contrast to a second von Weiss' map printed also in Vienna in 1829 in twenty one map-sheets under the title *Carte der Europäischen Turkey nebst einen theile von Kleinasien*, in a slightly larger scale 1:563.000.

This second von Weiss' map is much more known, referenced and viewed and was recently analyzed concerning its possible roots, interactions and similarities with other maps of the same type and period³. The 1829 Weiss map was re-edited in 200 copies by major Thomas Best Jervis in

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¹See I. Kretschmer, J. Dörflinger, F. Wawrik, 1986. “Lexikon zur Geschichte der Kartographie”, in *Enzyklopädie der Kartographie*, Band C/1; C/2. Wien: Franz Deuticke, p. 64.

² Thanks are due to prof. Dimitris Dimitrakoudis, manager of the “Verband der Auslandspresse in Wien” for his contribution in locating this map in the Vienna Kriegsarchiv.

³ E. Livieratos, 2009, *Cartographic adventures of Greece, 1821-1919*, Athens: ELIA (in Greek: *Chartografikes peripeiteies tēs Ellados, 1821-1919*) 58-70 and http://cartography.web.auth.gr/Maplibrary/New/Weiss_vF.htm

1854, in order to be used by the British army in the Crimean War⁴. Jervis states in this map version that the Weiss map was “...originally founded, and constructed, on the basis of remarkable Russian materials by the Staff of the Austrian Quartermaster-General at the Command of Field Marchall Prince Schwarzenberg...”. According to E. Livieratos⁵, the key name here is the remarkable activities and mobility of Prince Karl Philipp Fürst zu Schwarzenberg (1771-1820): combining his death in 1820 with Jervis’ relevant comment on the 1854 version of Weiss map, one could realize that the preparation of the sources used for the creation of the Weiss maps should be found before 1820, remembering here that Anton Prokesch-Osten (1795-1876), an emblematic personality in the Austro-Greek relations of 19th cent.⁶, was in Schwarzenberg’s services from 1818 to 1820.

Following Schwarzenberg’s European itinerary, the Prince is found hosted, as a welcome personality, in the Russian Court in 1808, in the same period when Choiseul-Gouffier was also hosted for long, as an influential French Revolution dissident, after his Aegean intense mapping campaigns⁷. Two years later, the indefatigable Prince is treating in Paris the second marriage of Napoleon with the archduchess Marie Louise of Austria (1810) and soon after (1812), he leads the auxiliary Austrian corps following the French campaign against Russia before coming back in the anti-napoleonic order (1813-1814), re-established definitively by the Vienna Congress in 1814.

A parallel story is related to another map of French origin this time, the very well known map of Pierre Lapie (1777-1850) in fifteen sheets, printed in Paris in 1822 under the title *Carte Générale de la Turquie d’Europe*, in scale 1:800.000. This map is based on mapping data given by two equally important high rank military personalities, the head of the Dépôt Armand Charles Guillemot (1774-1840) and Boudin de Tromelin (1771-1842). Both are also the providers of mapping data for a second Lapie map printed in Paris in 1826, under the title *Carte Physique, Historique et Routiere de la Grèce* in scale 1:400.000. Guillemot and Tromelin are central figures of military mapping, cartographically and geographically active in all lands and territories of Austro-French confrontation, antagonism but also comprehension.

The Weiss and Lapie maps present impressive similarities, not only due to their same geographic coverage and the close dates of their preparation. The key persons who influenced the preparation of these maps were continuously intersected in all fields of confrontation, diplomatic and military during the three first decades of 19th cent. So, a study of these maps is of particular importance not only because of their intriguing similarities but also due to the area they represent, where significant activity for the formation of the New Greek state developed during the first critical decade (1820-1830) of its establishment.

and <http://www25.brinkster.com/mcmk/balkan/> (Carte der Europäischen Türkei in XXI Blättern, Wien 1829). The map used in this paper is from prof. emer. Ch. Papastathis map collection.

⁴ Private communication to E. Livieratos by Francis Herbert (2007).

⁵ E. Livieratos 2009, *Cartographic adventures...*, 69-70.

⁶ See E. Livieratos 2010, “Panorama of the Austrian cartographic impact in the late 18th, 19th and early 20th century Greece. A strong example of the international character of Cartographic Heritage”, presented in 5th ICA Workshop on *Digital approaches to cartographic heritage*, Vienna 22-24 February.

⁷ Some similarities of Choiseul-Gouffier’s representations and the Weiss maps have identified by Livieratos 2009.

The Weiss map

The year of the first von Weiss map publication in Vienna, 1821, signifies also the outbreak of the Greek War of Independence to which the Holy Alliance was initially against, because firstly it sounded recalling echoes of the French Revolution and secondly, because it was contradicting the rules and principles agreed in the Vienna Conference of 1814, re-establishing the old European Order. Later on, in the 1820s the policies of the Great Powers to solve the Issue of the Greek Independence were changed and even the initial hostility of Metternich was smoothed, in the frame of a general geostrategy concerning the future of South East Europe. According to less known sources⁸, Metternich, in the late 1820s, examined the idea of the creation of a great Greek state succeeding the Ottoman Empire in its European territories! This idea⁹ of Metternich developed at the end of the decade supporting the reconstitution of a large Greek state with Constantinople as its capital!¹⁰



Figure 1. The Franz von Weiss map of 1829 in twenty one sheets entitled *Carte der Europaischen Turkey nebst einen theile von Kleinasien*.

⁸ See Livieratos 2010, “Panorama of the Austrian cartographic impact...”, Livieratos 2009, *Cartographic adventures...*, p. 66 and the relevant reference there to G. Hering, referring to the role of A. Prokesch-Osten.

⁹ See “Metternich, Clemens”, Papyros Larousse Britannica, v.44, pp. 49-21, 1996.

¹⁰ For the original proposals to replace the Ottoman Empire by a Greek Empire, see C.F. Chasseboeuf, dit Volney 1788, *Considérations sur la Guerre actuelle des Turcs*, Paris, 1788 and W. Eton 1798, *A Survey of the Turkish Empire...*, London. See also E. de Marcère 1924, *Une ambassade a Constantinople. La politique orientale de la Révolution Française*, Paris : Alcan and An. Bruneau, Traditions et politique de la France.

In 1829, the year of publication of the second Weiss map (Fig. 1)¹¹, the war between the Russian and Ottoman Empires was over (1828-29) and according to the Peace Treaty of Adrianople the Ottoman Empire recognized the autonomy of the Modern Greek state¹².

The twenty one map-sheets of the Weiss map of 1829, in 1:563.000 scale, are arranged three in longitude and seven in latitude and represent a map with overall dimensions of about 2 X 3 meters (covering six square metres in total). The map depicts all of southeastern Europe, from Moldova to Crete and from the northern Dalmatian coast to Istanbul and western Anatolia. The meridian passing from the Ferro Island is used as prime meridian.

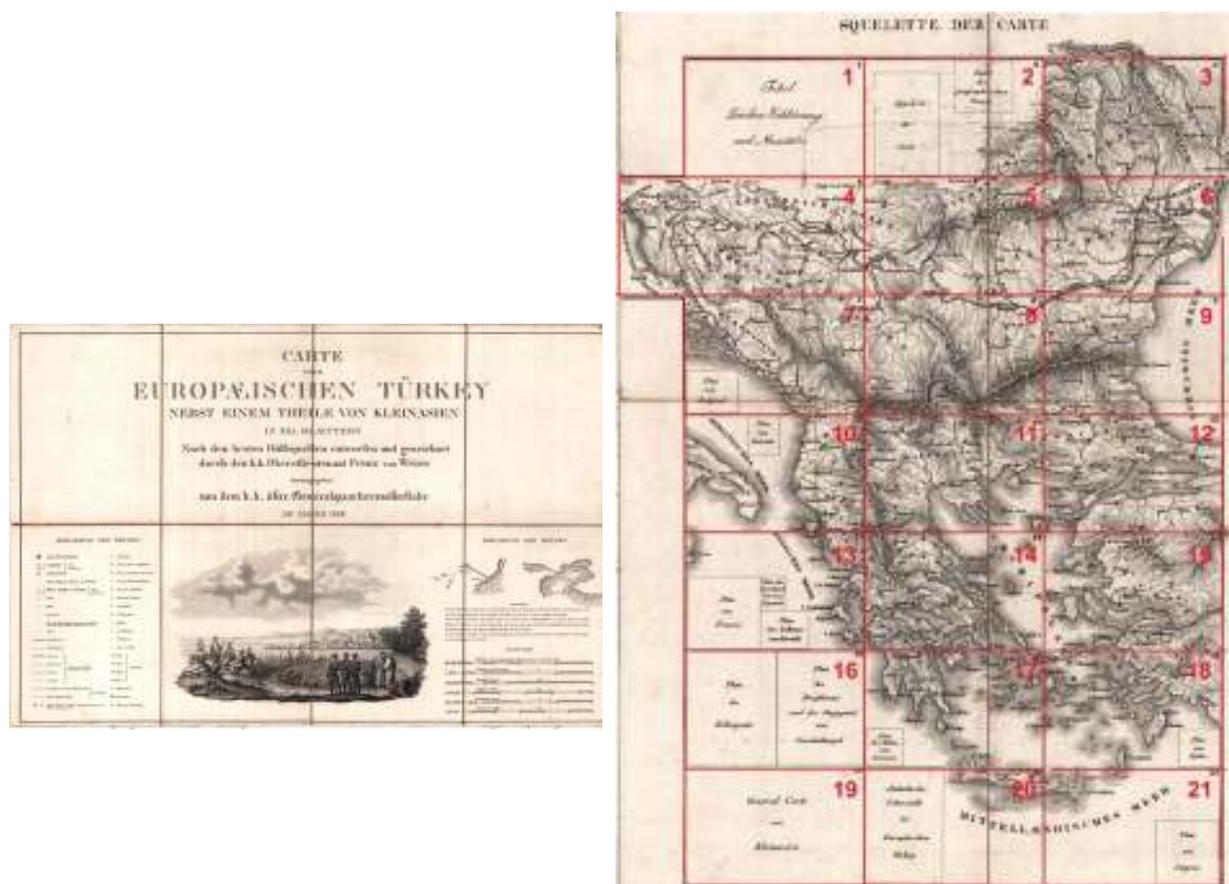


Figure 2. Left: The No. 1 map-sheet of Weiss map with its title, legend, scale, explanatory notes and a gravure. Right: The twenty one map-sheet numbering.

In Weiss' twenty one map-sheets, the New Greek state established by the London Conference in 1830 is represented in four map-sheets whilst the territories of Modern Greece are represented in eleven (almost the 50% of the map area). The sheet No. 19 depicts the Black Sea and the surroundings in scale 1:2.880.000 and sheet No. 16 depicts the Straits of the Hellespont and the Bosphorus in scale 1:183.000 with the wider district of Istanbul in 1:114.000 scale. In addition, there are insets of eight city-plans and sites of strategic interest at different scales (Belgrade, Butrint, Preveza, Rio-Antirio, Isthmus of Corinth, Navarino, Rhodes and Izmir)¹³.

¹¹ The map belongs to prof. emer. Ch. Papastathis map collection.

¹² It would be interesting to analyze the Weiss map in a possible relation with Metternich's revised policy on the Greek Issue and the cartographic elements represented in this large map as far as the geo-strategic areas depicted on the map as insets are concerned.

¹³ For an evaluation see Livieratos 2009, *Cartographic adventures...*, 62.

The geographic area (the geographic map-window) presented in the Weiss' map is the same in many other maps of about the same period, showing the interest of the Great Powers in South East Europe¹⁴. This is the case of the map of the French Colonel Pierre Lapie (1777-1850) printed in Paris in 1822, followed by his 1826 map representing a limited geographic area focused mainly on that of the New Greek state.

The Lapie map

Pierre Lapie was a top geographic engineer at the French "Dépôt de la guerre". His 1822 fifteen sheets map, the *Carte Generale de la Turquie d'Europe* in scale 1:800.000 (Fig. 3, left) as well as his second 1826 map in four sheets *Carte Physique, Historique et Routière de la Grèce* in 1:400.000 scale¹⁵ (Fig. 3, right), both printed in Paris could be seen as subject of interesting investigations in relation to the Weiss maps. Here, the digital technologies as applied in the analysis and comparisons of old maps could be useful tools for such investigations.



Figure 3. Left: The 1822 Lapie map. Right: The 1826 Lapie Map.

The dimensions of the 1822 Lapie map are 170 cm (in longitude) by 220 cm (in latitude). The map sheet No.1 depicts the Straits of the Dardanelles in 1:266.000 scale and the Bosphorus with the wider district of Istanbul in 1:200.000 scale in the same way Weiss represents the same areas. Lapie also includes a plan of the island of Rhodes, together with other plans as e.g. the plan of Thessaloniki. It is important to notice here that the plan of the island of Rhodes in Lapie's map is

¹⁴ According to E. Livieratos, the roots of this geographic map-window are found for the first time in Martin Waldseemüller's map (Nova Tabula) in the Schott Strasbourg Ptolemy's *Geographia* edition of 1513 (Livieratos, *Cartographic adventures...*, 25). It is also reproduced by Rigas Velesinlis in his *Charta* (Vienna, 1797) and by Anthimos Gazis in his *Pinax* (Vienna, 1800), see E. Livieratos 2008, "On the cartography of Rigas Charta", *e-Perimtron*, Vol. 3, No. 3, 120-145 or M. Pazarlı, A. Tsorlini, E. Livieratos 2010, "Vienna, late 18th century...: Birth and importance of two monuments of Greek cartographic heritage, the Rigas Velesinlis' *Charta* and the Anthimos Gazis' *Pinax*, from a digital point of view", 5th ICA Workshop on *Digital Approaches to Cartographic Heritage*, Vienna 22-24 February 2010.

¹⁵ Both maps belong to the Sylvia Ioannou map collection.

different from that in Weiss' map which, on the contrary is surprisingly similar to the relevant map given earlier by Choiseul-Gouffier¹⁶.

On the map comparison

Lapie's two maps (1822 and 1826) were printed just one year after and three years before the two maps of Weiss (1821 and 1829) and this is one of the reasons¹⁷ for the comparative study which is ongoing and focused, in this paper, in the Peloponnese, especially on the region of Argolis.

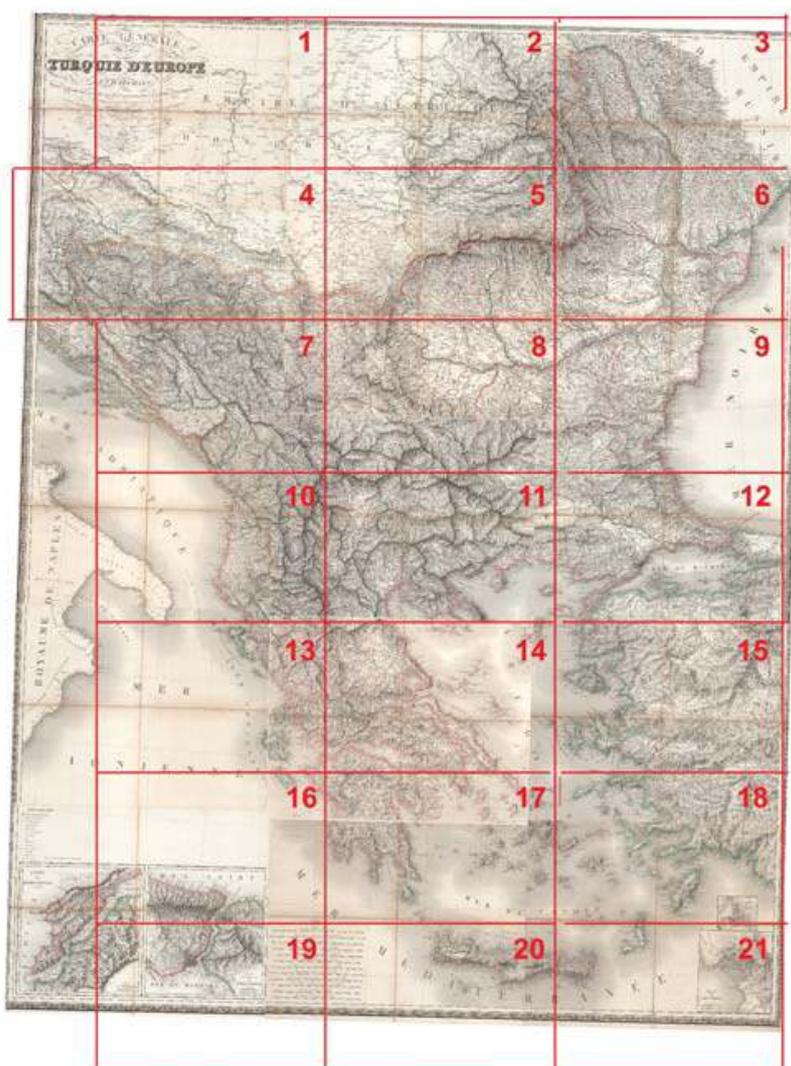


Figure 4. The 1822 Lapie map associated to the Weiss 1829 map sheet division.

The study and research of Weiss' and Lapie's maps considered as relevant, is in progress not only due to their similarity and cartographic interest but also because they were all printed in the same

¹⁶ See the relevant story in the Introduction concerning the Choiseul-Gouffier accommodation in the Russian Court with respect to the Russian sources used in the preparation of the Weiss map under the leadership of Prince Schwarzenberg. The similarity of the Rhodes plan in Choiseul-Gouffier and Weiss' maps is shown in Livieratos, *Cartographic adventures...*, 62-63.

¹⁷ To which the yet uncompleted historic framework should be added.

decade that the New Greek state was born. Thus, these maps are viewed not only as belongings of the Austrian and French cartographic history of the 1820s, but also as fundamental parts of the Greek cartographic heritage. For example, starting from the coastline analysis (Fig. 5 shows that of Peloponnesus¹⁸) we notice interesting similarities, considering of course the scale difference of the 1822 Lapie and the 1829 Weiss maps (Fig. 5 Left) and the close scales of the 1826 Lapie and 1829 Weiss maps (Fig. 5 Right).

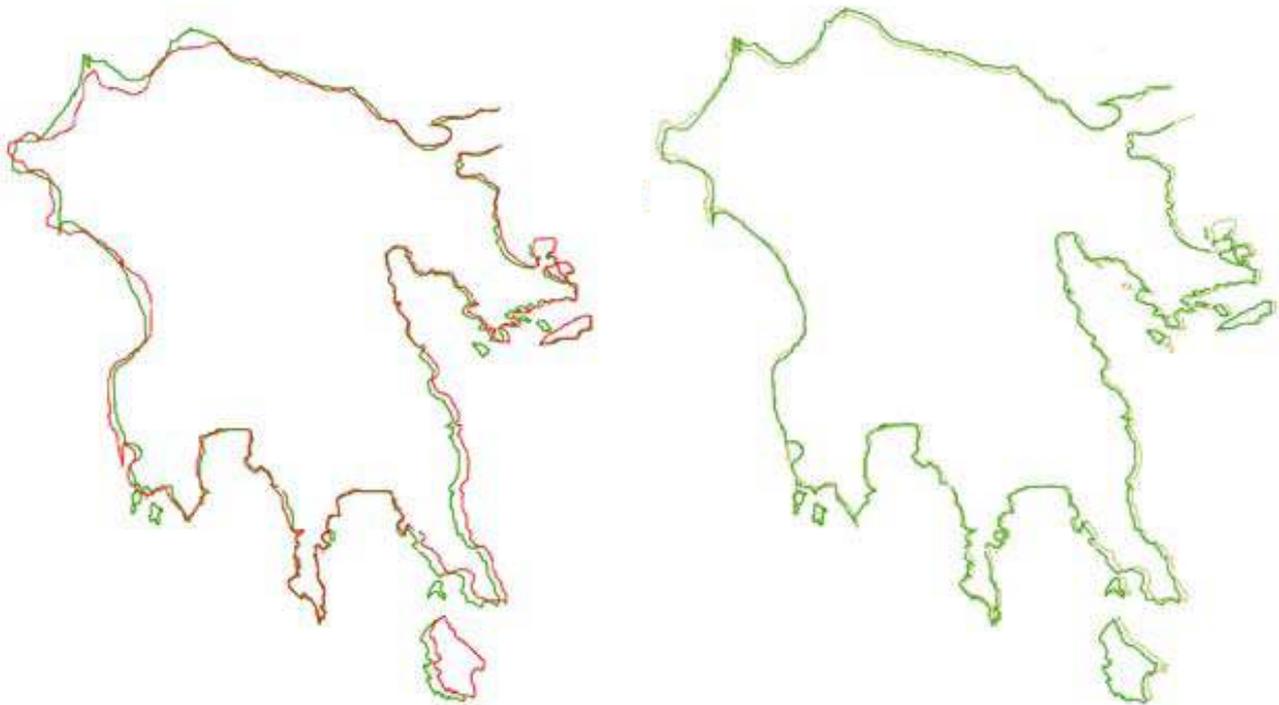


Figure 5. Left: The Peloponnesus coastline similarity fitting of the 1822 Lapie map (red line) with the 1829 Weiss map (green line). Right: The Peloponnesus coastline similarity fitting of the 1826 Lapie map (red line) with the 1829 Weiss map (green line). The fitting is almost identical.

As a first step in the analysis focused on the region of Argolis (NE part of Peloponnesus) shown in the available Lapie and Weiss maps (Fig. 6), since the area is the centre of particular historical evidence related to the birth of the Modern Greek state¹⁹, some interesting results can be shown in Fig. 7 concerning the coastline and the location of settlements and toponyms. The 1826 Lapie and the 1829 Weiss maps are almost similar in the coastline arrangement but the Weiss map is somehow richer in toponymy and much richer in thematic point-wise information, especially concerning strategic thematic data and evaluation.

¹⁸ Livieratos, *Cartographic adventures...*, 68, 69.

¹⁹ The first three constitutive national Assemblies, during the Greek War of Independence in the 1820s, took place in the Argolis region, namely in Epidaurus (1821), in Astros (1823) and in Troizina (1827).



Figure 6. The area of Argolis. Left: Lapie 1822. Middle: Lapie 1826. Right: Weiss 1829.

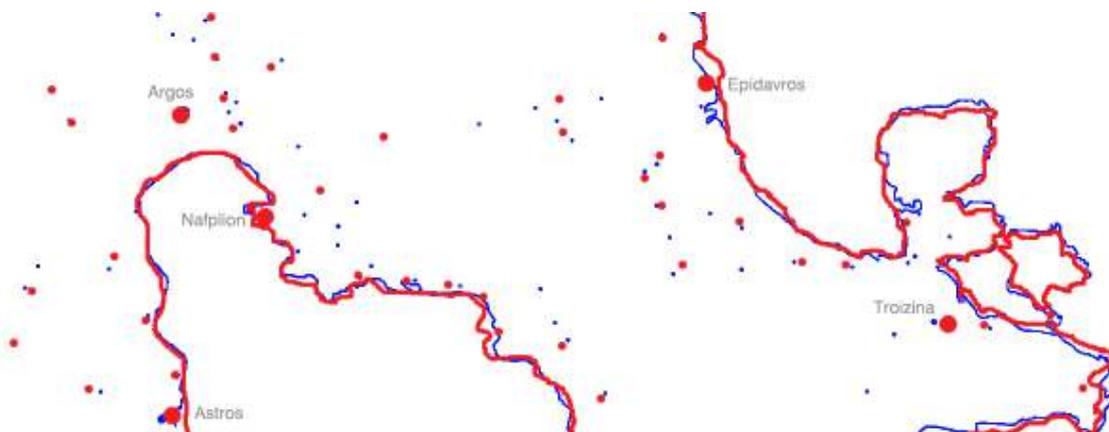


Figure 7. The area of Argolis. A second order polynomial best fit shows the deviations between the 1822 Lapie map (Red) and the 1826 Lapie map (Blue).



Figure 8. The area of Argolis. A second order polynomial best fit shows the deviations between the 1826 Lapie map (Blue) and the 1829 Weiss map (Green).

The same observation holds for a second focus on another known historical site, the castle-town of Modon (Methoni)²¹ and the nearby Navarino Bay (see Figs. 19, 10). As it is seen in Fig. 9, ref-

²¹ Important for the previous Venetian domination in the area.

erence to the important events that took place there in 1770, during the Russian-Ottoman War²², is made only in Weiss’ map and not on the Lapie maps. In addition, the Weiss map is much more detailed in thematic information related e.g. to the evaluation of the coastline or by denoting important fixed points which are useful for terrain reconnaissance such as churches and country-side chapels. It is also important to note the point-wise information given in Weiss’ map concerning the bathymetry along the coastline which is missing from Lapie’s maps.



Figure 9. The area of Modon. Left: Lapie 1822. Middle: Lapie 1826. Right: Weiss 1829 in which it is stated the 1770 uprising of the Greeks (the Orlov Revolt) at the instigation of Count Orlov, commander of the Russian naval forces during the War between the Russian and Ottoman Empires.

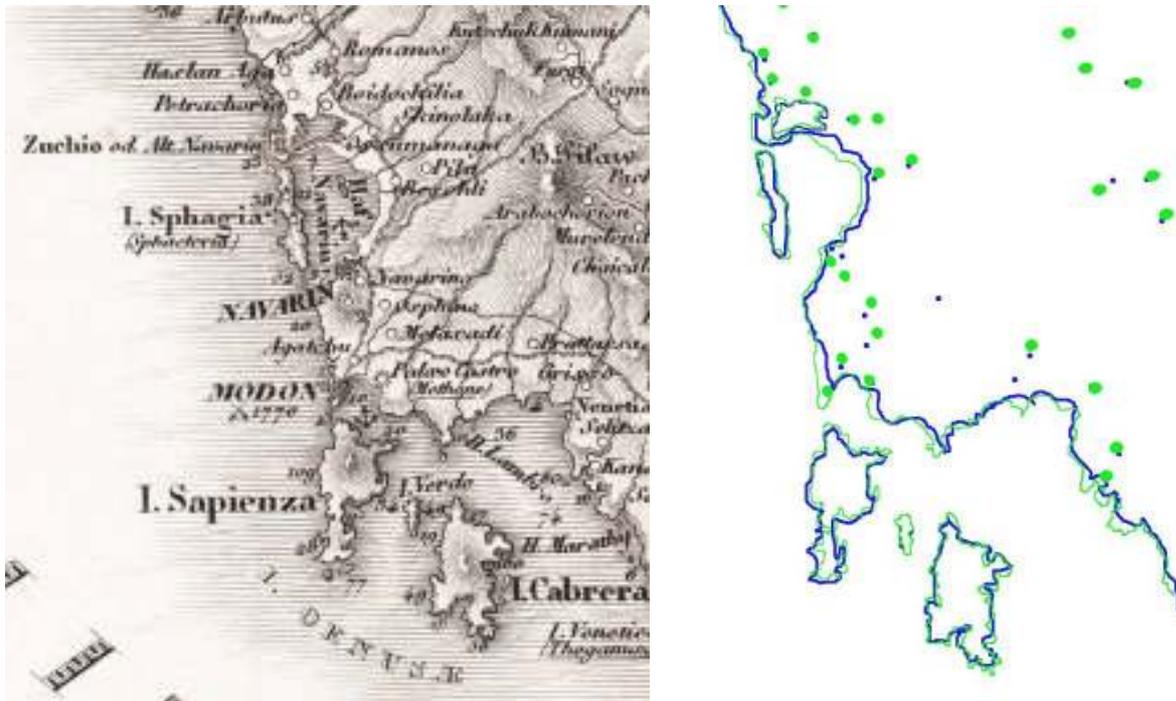


Figure 10. Left: The 1829 Weiss map representing the area of Modon – Navarino. The notice about the 1770 Orlov Events in Modon is clearly reported. Right: A second order polynomial best fit shows the deviations between the 1826 Lapie map (Blue) and the 1829 Weiss map (Green) in the Modon – Navarino area. Again the Weiss map contains some more toponyms, apart from the richer thematic point-wise content.

²² Related to the “Orlov Revolt” (or the “Orlov Events” in Greek historiography) as it is known the disastrous Greek uprising in Peloponnesus at the instigation of Count Orlov, commander of the Russian naval forces. For a rough reference see e.g. http://en.wikipedia.org/Orlov_Revolt or <http://de.wikipedia.org/wiki/Orlow-Revolt>

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